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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,022	05/16/2001	Guy Barre	TS 5549 US	2253
7590	01/12/2004			
Richard F Lemuth Shell Oil Company P O Box 2463 Houston, TX 77252-2463			EXAMINER GRIFFIN, WALTER DEAN	
			ART UNIT	PAPER NUMBER
			1764	
DATE MAILED: 01/12/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,022

Applicant(s)

BARRE ET AL.

Examiner

Walter D. Griffin

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

The rejections under 35 USC 102 and 103 as described in the Office Action mailed on August 6, 2003 have been withdrawn in view of the amendment filed on November 7, 2003.

New rejections follow.

Claim Objections

Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 13 does not further limit claim 1 because the catalyst of claim 1 consists essentially of the listed components whereas as the catalyst of claim 13 comprises the listed components. The language of claim 1 excludes certain components whereas the language of claim 13 does not exclude any additional components in the catalyst.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/01515 to Moureaux.

The Moureaux reference discloses a process for dewaxing a hydrocarbon that has a sulfur content of less than 1000 ppmw and a nitrogen content of less than 50 ppmw. The process comprises contacting the hydrocarbon with a catalyst comprising a noble metal, a zeolite such as a dealuminated ZSM-5 zeolite, and a silica binder. No additional metal need be included in the catalyst. The ZSM-5 zeolite would necessarily have a constraint index within the claimed range. The dealumination of the zeolite can be achieved by methods disclosed in European patent specification 96921992.2 (EP 0832171 B1). These methods include treatment of zeolite and binder extrudates with an aqueous solution of a fluorosilicate salt. Following the dewaxing, the dewaxed feed is subjected to a hydrotreatment step. See page 9, lines 30-35; page 10, lines 1-3;

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page 11, lines 9-18 and 30-35; page 14, lines 4-31; page 15, lines 17-35; page 16, lines 1-5; page 21, lines 20 and 21; and page 22, lines 1-11.

The Moureaux reference does not disclose the claimed feeds, does not disclose that the feed contains more than 1000 ppmw of sulfur, and does not disclose the retrofitting process.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing the claimed feeds because these feeds are physically and chemically similar to those disclosed by Moureaux and therefore would be expected to be effectively treated in the Moureaux process.

It also would have been to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing feeds that have more than 1000 ppmw of sulfur because one would expect the process to still effectively convert feeds having slightly more than 1000 ppmw sulfur. Sulfur is a known catalyst poison and one would operate with feeds having slightly more than 1000 ppmw of sulfur if slightly higher catalyst poisoning rates could be tolerated.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by replacing a solvent dewaxing step with the catalytic dewaxing step because Moureaux discloses that solvent dewaxing is necessary if the dewaxing step is not present. Therefore, one would substitute catalytic dewaxing for solvent dewaxing since each type of dewaxing performs an equivalent function.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/01515 to Moureaux as applied to claim 1 above, and further in view of Ward (US 4,743,354).

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As discussed above, the Moureaux reference does not disclose further hydrocracking of the dewaxed product.

The Ward reference discloses the hydrocracking of an effluent from a dewaxing zone. See column 8, lines 28-51.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by hydrocracking the effluent from the dewaxing zone as suggested by Ward because desired products including middle distillates will be produced.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/01515 to Moureaux as applied to claim 1 above, and further in view of Abdo et al. (US 4,867,861).

As discussed above, the Moureaux reference does not disclose utilizing nickel in the catalyst.

The Abdo reference discloses dewaxing catalysts that contain noble metals or nickel. See column 11, lines 34-41.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing nickel in the catalyst as suggested by Abdo because nickel has an equivalent function to noble metals such as platinum and therefore would be expected to be effective in the dewaxing catalyst of Moureaux.

Claims 17-25 are rejected under 35 USC 103 as being unpatentable over WO 98/01515 to Moureaux in view of Abdo et al. (US 4,867,861).

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As discussed above, the Moureaux reference does not disclose the claimed feeds, does not disclose the claimed sulfur content of the feed, and does not disclose the use of nickel in the catalyst.

The Abdo reference discloses dewaxing catalysts that contain noble metals or nickel. See column 11, lines 34-41.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing nickel in the catalyst as suggested by Abdo because nickel has an equivalent function to noble metals such as platinum and therefore would be expected to be effective in the dewaxing catalyst of Moureaux.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing the claimed feeds because these feeds are physically and chemically similar to those disclosed by Moureaux and therefore would be expected to be effectively treated in the Moureaux process.

It also would have been to one having ordinary skill in the art at the time the invention was made to have modified the process of Moureaux by utilizing feeds that have more than 1000 ppmw of sulfur because one would expect the process to still effectively convert feeds having slightly more than 1000 ppmw sulfur. Sulfur is a known catalyst poison and one would operate with feeds having slightly more than 1000 ppmw of sulfur if slightly higher catalyst poisoning rates could be tolerated.

Response to Arguments

The argument that the claims distinguish over the Moureaux reference by excluding additional catalyst components is not persuasive because Moureaux does not require any metals in addition to the noble metal in the catalyst.

The argument that the intermediate hydrotreating step of claim 12 distinguishes over the applied references is not persuasive because Moureaux discloses a hydrotreating step subsequent to the dewaxing step. See, for example, lines 4-12 on page 14. The Ward reference supplies only the missing hydrocracking step.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

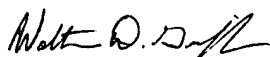
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447.

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The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
January 6, 2004